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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/881,594
Filing Date: June 14, 2001
Appellant(s): SOLLEE, PATRICK N.

MAILED
AUG 08 2006
Technology Center 2100

Patrick Sollee
For Appellant

EXAMINER'S ANSWER

Art Unit: 2157

This is in response to the appeal brief filed May 30, 2006 appealing from the Office action mailed January 18, 2006

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

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Claims 7, 32 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Wikipedia Online Dictionary, definition for "keep-alive."

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7, 25, 26, 30, 31, 33, 34-36, 38 and 39 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Thomas et al. US Patent Publication No. 2002/0184316.

Thomas teaches the invention as claimed including system for MAPI client server communication (see abstract).

As per claim 1, Thomas teaches a method for use in communications involving a first terminal that is coupled to one side of a firewall and network address translator, the method comprising:

sending, by the first terminal, a message identifying the first terminal to a node on another side of the firewall and network address translator (a MAPI client initiates a session with a server; paragraph 0015, 0016, 0021, 0028, 0033-0035);

receiving, by the first terminal, another message from the node, wherein the messages between the first terminal and the node causes creation of a path through the firewall and network address translator (sending messages from a node on one side of a network to another node outside of the network; paragraph 0029, 0033-0035); and

repeatedly sending keep-alive messages to maintain the path through the firewall and network address translator (sending keep-alive messages; paragraphs 0039, 0051).

As per claim 2, Thomas teaches the method of claim 1, further comprising receiving a call request, by the first terminal, from the node over the path maintained through the firewall and network address translator (requesting a call from a server; paragraphs 0033, 0034).

As per claim 3, Thomas teaches the method of claim 1, wherein repeatedly sending the keep-alive messages is based on a timer in the first terminal (paragraph 0039, 0051).

As per claim 4, Thomas teaches the method of claim wherein sending the identifying message comprises sending a registration message to register the first terminal with the node (paragraph 0033).

As per claim 25, Thomas teaches a device capable of being used in communications through a firewall and network address translator, the device comprising:

an interface adapted to exchange messages with a node on another side of the firewall and network address translator, the exchange of messages with the node to create a path through the firewall and network address translator (a MAPI client initiates a session with a server; paragraph 0015, 0016, 0021, 0028, 0029, 0033-0035); and

a controller adapted to repeatedly send keep-alive messages to maintain the path through the firewall and network address translator (sending keep-alive messages; paragraphs 0039, 0051).

As per claim 26, Thomas teaches the device of claim 25, further comprising a timer to determine timing of the keep-alive messages (paragraph 0039, 0051).

As per claims 30 and 35, Thomas teaches the method and device of claims 1 and 25, wherein sending the message and receiving the message are used to perform registration of the first terminal, and

Wherein repeatedly sending the keep-alive messages to maintain the path through the firewall and network address translator is performed for a duration of the registration of the first terminal (pp 0038-0039).

As per claims 31 and 36, Thomas teaches the method and device of claims 1 and 25, wherein maintaining the path through the firewall and network address translator comprises maintaining a signaling path between the first terminal and the node through the firewall and network address translator (pp 0033).

As per claims 33 and 38, Thomas teaches the method and device of claim 1, wherein repeatedly sending the keep-alive messages to maintain the path through the firewall and network address translator causes a mapping table to be maintained by the firewall and network address translator, the mapping table containing a mapping between an internal address of the first terminal and an external address of the first terminal (pp 0033-0037).

As per claims 34 and 39, Thomas teaches the method and device of claims 33 and 38, wherein timing of repeatedly sending the keep-alive messages is controlled by a timer, and wherein repeatedly sending the keep-alive messages is performed at a periodic interval sufficient to prevent closing of the mapping caused by time-out in the firewall and network address translator.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically taught or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6, 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al. US Patent Publication No. 2002/0184316 in view of Roach US Patent Publication No. 2002/0037723.

Roach teaches the invention substantially as claimed including using SIP (see abstract).

As per claim 5, Thomas teaches the method of claim 4. Thomas does not teach wherein sending the registration message comprises sending a Session Initiation Protocol REGISTER message. Roach teaches sending the registration message comprises sending a Session Initiation Protocol REGISTER message. See paragraphs 0102-0105. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine registering messages with the SIP REGISTER message of Roach with sending messages of Thomas. A person of ordinary skill in the art would have been motivated to do this to initiate real time media data sessions.

As per claim 6, Thomas and Roach teach the method of claims 5, 31, and 36 Thomas and Roach do not teach wherein sending the registration message comprises sending the registration message to a Session Initiation Protocol proxy, the node comprising the Session Initiation Protocol proxy. Roach teaches sending the registration message to a Session Initiation Protocol

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proxy, the node comprising the Session Initiation Protocol proxy. See paragraphs 0102-0105. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine registering messages to a SIP Proxy of Roach with sending messages of Thomas. A person of ordinary skill in the art would have been motivated to do this to initiate real time media data sessions.

Allowable Subject Matter

Claims 7, 32 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(10) Response to Argument

The examiner summarized the various points raised by the Appellant and addresses replies individually.

As per Appellant's arguments filed on 30 May 2006, the appellant argues that Thomas does not teach:

a path through a firewall and network address translator to be maintained by the periodic sending of keep-alive messages. Appellant argues that Thomas teaches that the session is repeatedly initiated and therefore not maintained (see Brief Page 4, lines 11-15, and page 5, lines 11-12 and lines 19-22, Page 8, lines 5-7, Argument A).

In response to Argument A, Thomas, teaches a periodic initiation of a communication session by the client. The client informs the server of its address in location, see paragraph

0033-0036. This is analogous to the first two limitations of claim 1 where a first terminal sends a message identifying the first terminal to a node on another side of the firewall and network address translator and receiving by the first terminal, another message from the node, wherein the messages between the first terminal and the node causes creation of a path through a firewall and network address translator. In Thomas, the client is the “first terminal” of the claim because it initiates the session with the server. The client sends a UDP packet to a server, or “a node on the other side of the firewall and network translator” and said in the claim, and identifies itself to the server. The client and server are in communication for the rest of the session, and have between them an established communication, or signaling path. See paragraphs 0038-0039 and 0051.

Once this session is established, for the client and the server to stay in communication so that the server can notify the client of any new events, the client must send initiate requests at periodic or repeated intervals. See paragraphs 0015, 0016, 0051 and 0056. The client sends these messages to the server so that during a communication session, the server always know how to connect with the client, which is located behind a firewall and network address translator. See paragraph 0038 and 0039 of Thomas. The client sends the server initiation requests so that the server notifies the client of any new events during the session. The client sends initiation requests to the server so that the server can stay connected to the client. See paragraphs 0038-0039, 0048, 0051 and 0056. This means that the client periodically sends initiation requests so the server can stay connected with the client, or “repeatedly sending keep-alive messages to maintain a path through the firewall and network address translator” as stated in the claim.

Also, by the definition of Keep-Alive as shown by the Wikipedia dictionary, a keep-alive is a message sent by one device to another to check that the link between the two is operating. A keepalive signal is often sent at predefined intervals. The appellant is claiming that a keep-alive message is repeatedly sent through the firewall and network address translator, which is also the teaching of the reference Thomas in Paragraph 0051.

The Appellant argues that Thomas does not teach that the keep-alive messages are sent to maintain the path through the firewall and network address translator for a duration of the registration of the first terminal (see Brief page 7, lines 13-16, Argument B).

In response to Argument B, Thomas teaches that Once this session is established, for the client and the server to stay in communication so that the server can notify the client of any new events, the client must send initiate requests at periodic or repeated intervals. See paragraphs 0015, 0016 and 0056. The client sends these messages to the server so that during a communication session, the server always know how to connect with the client, which is located behind a firewall and network address translator. See paragraph 0038 and 0039 of Thomas. The client sends the server initiation requests so that the server notifies the client of any new events during the session. The client sends initiation requests to the server so that the server can stay connected to the client. See paragraphs 0038-0039, 0048, 0051 and 0056. The minimum time for an interval that a message can be sent for the keep-alive to be enabled is 30 seconds. This gives the server enough time to recognize the client. The interval for the communication session is set at a minimum to the amount of time that would be needed to complete the necessary functions being performed by the server and the client. See paragraphs 0043-0045.

The appellant argues that Thomas does not teach a mapping table which contains a mapping between an internal address of the first terminal and an external address of the first terminal (see Brief, Page 8, lines 16-21, Page 9, lines 1-2, Argument C)

In response to Argument C, Thomas teaches a Nat and/or PAT gateway or firewall that modifies the IP address of packets as they are communicated to the public network, paragraph 0041-0045. Paragraph 0007 and Table 2 show that the NAT or PAT contains a mapping table which translates private addresses to public addresses and corresponding ports in the public network.

The Appellant argues that the a person of ordinary skill in the art would not have used SIP messages of Roach for retrieval of e-mail as performed using the MAPI mechanism taught in Thomas (see Brief page 10, lines 8-11, Argument D).

In response to Argument D, Roach teaches the use of SIP in a packet data network supporting multimedia information such as an IP network. See paragraph 101 of Roach. Thomas also teaches a packet data network such as an IP network, see paragraph 0028 of Thomas. Thomas teaches that the client are server communicate Internet Protocol packets. The server runs one or more MAPI sever applications. MAPI is a messaging architecture that enables multiple applications to interact with multiple messaging systems across a variety of hardware platforms, including e-mail and multimedia messages.

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Applicant argues that Thomas does not teach exchanging messages by the first terminal with the node over the path maintained through the firewall and network address translator to establish a call session, as stated in claim 7 (see Brief page 6, lines 16-18) and maintaining a SIP signaling path through the firewall and network address translator, as stated in claims 32 and 37 (see Brief page 10, line 18), Argument E.

In response to Arguemnt E, the argument is moot because the claims 7, 32 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


For the above reasons, it is believed that the rejections should be sustained.

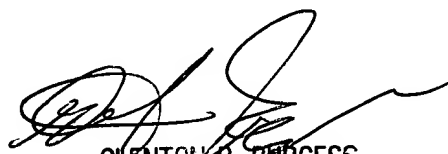
Respectfully submitted,

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August 1, 2006

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(8) Evidence Relied Upon

Wikipedia Online Dictionary, definition for "keep-alive."

Keepalive

From Wikipedia, the free encyclopedia

A **keepalive** is a message sent by one device to another to check that the link between the two is operating. A keepalive signal is often sent at predefined intervals, and plays an important role on the Internet: if no reply is received, the link is assumed to be down and future data (until the link is up again) will be routed via another path. Since the only purpose is to find links that don't work, keepalive messages tend to be short and not take much bandwidth.

Retrieved from "<http://en.wikipedia.org/wiki/Keepalive>"

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